

## ABSTRACT OF THE DISCLOSURE

A system and method increases the number of split transactions that can be outstanding on an input/output (I/O) bus operating in accordance with a bus protocol, such as the Peripheral Component Interface Extended (PCI-X) specification standard. An I/O  
5 bridge that interfaces between one or more processors and one or more I/O devices coupled to the I/O bus includes a transaction initiation engine, a transaction completion engine and one or more queues for buffering information that is to be transferred onto or which has been received from the I/O bus. The I/O bridge is configured to concatenate, at least logically, a tag field and a function number field from an attribute message so as  
10 create a novel, super-tag field that the I/O bridge then associates with each bus transaction. By creating the super-tag field, the I/O bridge substantially increases the number of uniquely identified bus transactions which may be responded to with a Split Response.